

Title (en)  
SPUR GEAR TRANSMISSION

Title (de)  
STIRNRADGETRIEBE

Title (fr)  
ENGRENAGE CYLINDRIQUE

Publication  
**EP 3368797 B1 20200812 (DE)**

Application  
**EP 16788104 A 20161028**

Priority  
• DE 102015221234 A 20151030  
• EP 2016076006 W 20161028

Abstract (en)  
[origin: WO2017072268A1] The invention relates to a spur gear transmission having at least two toothed spur gears, the teeth of which intermesh and which can each be rotated about an axis of rotation; having an enveloping wall which encloses the two spur gears in the circumferential direction and in the direction of the axis of rotation; the enveloping wall having an internal contour which is matched to the external diameters of the spur gears in such a way that two annular gaps result which merge into each other between the enveloping wall and the spur gears, in each case an annular gap being arranged at least substantially concentrically in relation to a respective axis of rotation; and having a lubricating device which is set up to lead a stream of lubricant into the teeth of the spur gears. The spur gear transmission according to the invention is characterized in that in addition a cooling device is provided, which is set up to lead a stream of coolant through one or more cooling channels running within the enveloping wall and/or on the outside along the enveloping wall.

IPC 8 full level  
**F16H 57/04** (2010.01)

CPC (source: EP US)  
**F16H 57/0421** (2013.01 - EP US); **F16H 57/0424** (2013.01 - EP US); **F16H 57/0431** (2013.01 - US); **F16H 57/0461** (2013.01 - US);  
**F16H 57/0495** (2013.01 - EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2017072268 A1 20170504**; CN 108351019 A 20180731; CN 108351019 B 20210226; DE 102015221234 A1 20170504;  
EP 3368797 A1 20180905; EP 3368797 B1 20200812; JP 2018538487 A 20181227; JP 6743140 B2 20200819; US 10823279 B2 20201103;  
US 2018320779 A1 20181108

DOCDB simple family (application)  
**EP 2016076006 W 20161028**; CN 201680062856 A 20161028; DE 102015221234 A 20151030; EP 16788104 A 20161028;  
JP 2018521991 A 20161028; US 201615772156 A 20161028